- 9. **220 MHz Radio Service Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to "Cellular and Other Wireless Telecommunications" companies. This category provides that a small business is a wireless company employing no more than 1,500 persons. According to the Census Bureau data for 1997, only twelve firms out of a total of 977 such firms that operated for the entire year in 1997, had 1,000 or more employees. If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business standard.
- Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the 220 MHz Third Report and Order, we adopted a small business size standard for defining "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. This small business standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years. The SBA has approved these small size standards. Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998. In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies

<sup>&</sup>lt;sup>12</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>&</sup>lt;sup>13</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 513322 (October 2000).

<sup>&</sup>lt;sup>14</sup> Amendment of Part 90 of the Commission's Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶ 291-295 (1997).

<sup>15</sup> Id. at 11068 ¶ 291.

<sup>16</sup> Id.

<sup>&</sup>lt;sup>17</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>&</sup>lt;sup>18</sup> See generally "220 MHz Service Auction Closes," Public Notice, 14 FCC Rcd 605 (WTB 1998).

<sup>&</sup>lt;sup>19</sup> See "FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made," Public Notice, 14 FCC Rcd 1085 (WTB 1999).

claiming small business status won 158 licenses.<sup>20</sup> A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.<sup>21</sup>

11. Lower 700 MHz Band Licenses. We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.<sup>22</sup> We have defined a small business as an entity that, together with its affiliates and controlling principals. has average gross revenues not exceeding \$40 million for the preceding three years.<sup>23</sup> A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. Additionally, the lower 700 MHz Service has a third category of small business status that may be claimed for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.<sup>25</sup> The SBA has approved these small size standards.<sup>26</sup> An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses. 27 A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses. 28 Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.<sup>29</sup>

<sup>&</sup>lt;sup>20</sup> See "Phase II 220 MHz Service Spectrum Auction Closes," Public Notice, 14 FCC Rcd 11218 (WTB 1999).

<sup>&</sup>lt;sup>21</sup> See "Multi-Radio Service Auction Closes," Public Notice, 17 FCC Rcd 1446 (WTB 2002).

<sup>&</sup>lt;sup>22</sup> See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), Report and Order, 17 FCC Rcd 1022 (2002).

<sup>&</sup>lt;sup>23</sup> Id. at 1087-88 ¶ 172.

<sup>&</sup>lt;sup>24</sup> Id.

<sup>&</sup>lt;sup>25</sup> Id. at 1088 ¶ 173.

<sup>&</sup>lt;sup>26</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

<sup>&</sup>lt;sup>27</sup> See "Lower 700 MHz Band Auction Closes," Public Notice, 17 FCC Rcd 17272 (WTB 2002).

<sup>&</sup>lt;sup>28</sup> See "Lower 700 MHz Band Auction Closes," Public Notice, 18 FCC Rcd 11873 (WTB 2003).

<sup>&</sup>lt;sup>29</sup> Id.

- 12. Upper 700 MHz Band Licenses. The Commission released a Report and Order, authorizing service in the upper 700 MHz band.<sup>30</sup> This auction, previously scheduled for January 13, 2003, has been postponed.<sup>31</sup>
- 13. Paging. In the Paging Second Report and Order, we adopted a size standard for "small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>32</sup> A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>33</sup> The SBA has approved this definition.<sup>34</sup> An auction of Metropolitan Economic Area (MEA) licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.<sup>35</sup> Fifty-seven companies claiming small business status won 440 licenses.<sup>36</sup> An auction of Metropolitan Economic Area (MEA) and Economic Area (EA) licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.<sup>37</sup> 132 companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2.093 licenses.<sup>38</sup> Currently, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the most recent Trends in Telephone Service. 608 private and common carriers reported that they were engaged in the provision of either paging or "other mobile" services. 39 Of these, we estimate that 589 are small, under the SBA-approved small business

<sup>&</sup>lt;sup>30</sup> Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, Second Memorandum Opinion and Order, 16 FCC Rcd 1239 (2001).

<sup>&</sup>lt;sup>31</sup> See "Auction of Licenses for 747-762 and 777-792 MHz Bands (Auction No. 31) Is Rescheduled," Public Notice, 16 FCC Red 13079 (WTB 2003).

<sup>&</sup>lt;sup>32</sup> Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, Second Report and Order, 12 FCC Rcd 2732, 2811-2812 ¶¶ 178-181 (Paging Second Report and Order); see also Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, Memorandum Opinion and Order on Reconsideration, 14 FCC Rcd 10030, 10085-10088 ¶¶ 98-107 (1999).

<sup>&</sup>lt;sup>33</sup> Paging Second Report and Order, 12 FCC Rcd at 2811 ¶ 179.

<sup>&</sup>lt;sup>34</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>35</sup> See "929 and 931 MHz Paging Auction Closes," Public Notice, 15 FCC Rcd 4858 (WTB 2000).

<sup>36</sup> See id.

<sup>&</sup>lt;sup>37</sup> See "Lower and Upper Paging Band Auction Closes," Public Notice, 16 FCC Rcd 21821 (WTB 2002).

<sup>&</sup>lt;sup>38</sup> See "Lower and Upper Paging Bands Auction Closes," *Public Notice*, 18 FCC Rcd 11154 (WTB 2003).

<sup>&</sup>lt;sup>39</sup> See Trends in Telephone Service, Industry Analysis Division, Wireline Competition Bureau, Table 5.3 (Number of Telecommunications Service Providers that are Small Businesses) (May 2002).

size standard.<sup>40</sup> We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

- 14. **Broadband Personal Communications Service (PCS).** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years. For Block F, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA. No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 "small" and "very small" business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F. On March 23, 1999, the Commission reauctioned 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.
- 15. Narrowband PCS. The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less. Through these auctions, the Commission awarded a total of forty-one licenses, 11 of which were obtained by four small businesses. To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the Narrowband

<sup>&</sup>lt;sup>40</sup> 13 C.F.R. § 121.201, NAICS code 517211.

<sup>&</sup>lt;sup>41</sup> See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, 11 FCC Rcd 7824, 7850-7852 ¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

<sup>&</sup>lt;sup>42</sup> See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, 11 FCC Rcd 7824, 7852 ¶ 60.

<sup>&</sup>lt;sup>43</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>&</sup>lt;sup>44</sup> FCC News, "Broadband PCS, D, E and F Block Auction Closes," No. 71744 (rel. January 14, 1997).

<sup>&</sup>lt;sup>45</sup> See "C, D, E, and F Block Broadband PCS Auction Closes," *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

<sup>&</sup>lt;sup>46</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 175, 196 ¶ 46 (1994).

<sup>&</sup>lt;sup>47</sup> See "Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674," Public Notice, PNWL 94-004 (rel. Aug. 2, 1994); "Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787," Public Notice, PNWL 94-27 (rel. Nov. 9, 1994).

PCS Second Report and Order.<sup>48</sup> A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.<sup>49</sup> A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.<sup>50</sup> The SBA has approved these small business size standards.<sup>51</sup> A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (MTA and nationwide) licenses.<sup>52</sup> Three of these claimed status as a small or very small entity and won 311 licenses.

16. Specialized Mobile Radio (SMR). The Commission awards "small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years. The Commission awards "very small entity" bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years. The SBA has approved these small business size standards for the 900 MHz Service. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band. A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.

<sup>&</sup>lt;sup>48</sup> Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, Second Report and Order and Second Further Notice of Proposed Rule Making, 15 FCC Rcd 10456, 10476 ¶ 40 (2000).

<sup>49</sup> Id.

<sup>50</sup> Id.

<sup>&</sup>lt;sup>51</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>&</sup>lt;sup>52</sup> See "Narrowband PCS Auction Closes," Public Notice, 16 FCC Rcd 18663 (WTB 2001).

<sup>&</sup>lt;sup>53</sup> 47 C.F.R. § 90.814(b)(1).

<sup>54</sup> Id.

<sup>&</sup>lt;sup>55</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999. We note that, although a request was also sent to the SBA requesting approval for the small business size standard for 800 MHz, approval is still pending.

<sup>&</sup>lt;sup>56</sup> See "Correction to Public Notice DA 96-586 'FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas," Public Notice, 18 FCC Red 18367 (WTB 1996).

<sup>&</sup>lt;sup>57</sup> See "Multi-Radio Service Auction Closes," Public Notice, 17 FCC Rcd 1446 (WTB 2002).

- 17. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed "small business" status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.
- 18. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is established by the SBA.
- 19. Private Land Mobile Radio (PLMR). PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee's primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we could use the definition for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any such entity employing no more than 1,500 persons. The commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. Moreover, because PMLR licensees generally are not in the business of providing cellular or other wireless telecommunications services but instead use the licensed facilities in support of other business activities, we are not certain that the Cellular and Other Wireless Telecommunications category is appropriate for determining how many PLMR licensees are small entities for this analysis. Rather, it may be more appropriate to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs. <sup>59</sup>
- 20. Fixed Microwave Services. Fixed microwave services include common carrier, <sup>60</sup> private-operational fixed, <sup>61</sup> and broadcast auxiliary radio services. <sup>62</sup> Currently, there are approximately 22,015

<sup>58</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>&</sup>lt;sup>59</sup> See generally 13 C.F.R. § 121.201.

<sup>60 47</sup> C.F.R. §§ 101 et seq. (formerly, part 21 of the Commission's Rules).

<sup>&</sup>lt;sup>61</sup> Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. See generally 47 C.F.R. parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

<sup>&</sup>lt;sup>62</sup> Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or (continued....)

common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this FRFA, we will use the SBA's definition applicable to "Cellular and Other Wireless Telecommunications" companies—that is, an entity with no more than 1,500 persons.<sup>63</sup> The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer small common carrier fixed licensees and 61,670 or fewer small private operational-fixed licensees and small broadcast auxiliary radio licensees in the microwave services that may be affected by the rules and policies adopted herein. The Commission notes, however, that the common carrier microwave fixed licensee category includes some large entities.

- 21. Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these definitions. The FCC auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity. An auction for one license in the 1670-1674 MHz band commenced on April 30, 2003 and closed the same day. One license was awarded. The winning bidder was not a small entity.
- 22. 39 GHz Service. The Commission defines "small entity" for 39 GHz licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years. "Very small business" is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. The SBA has approved these

<sup>63 13</sup> C.F.R. § 121.201, NAICS code 517212.

<sup>&</sup>lt;sup>64</sup> Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), Report and Order, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

<sup>&</sup>lt;sup>65</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>&</sup>lt;sup>66</sup> See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Band, Report and Order, 12 FCC Rcd 18600 (1997).

<sup>&</sup>lt;sup>67</sup> Id.

definitions.<sup>68</sup> The auction of the 2,173 39 GHz licenses began on April 12, 2000, and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses.

- 23. Local Multipoint Distribution Service. An auction of the 986 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years. An additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. These regulations defining "small entity" in the context of LMDS auctions have been approved by the SBA. There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small business winning bidders that won 119 licenses.
- 24. 218-219 MHz Service. The first auction of 218-219 MHz (previously referred to as the Interactive and Video Data Service or IVDS) spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Areas (MSAs). Of the 594 licenses, 567 were won by 167 entities qualifying as a small business. For that auction, we defined a small business as an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years. In the 218-219 MHz Report and Order and Memorandum Opinion and Order, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the preceding three years. A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not

<sup>&</sup>lt;sup>68</sup> See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Hector Barreto, Administrator, Small Business Administration, dated January 18, 2002.

<sup>&</sup>lt;sup>69</sup> See Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making, 12 FCC Rcd 12545, 12689-90 ¶ 348 (1997).

<sup>&</sup>lt;sup>70</sup> *Id*.

<sup>&</sup>lt;sup>71</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>&</sup>lt;sup>72</sup> See "Interactive Video and Data Service (IVDS) Applications Accepted for Filing," *Public Notice*, 9 FCC Rcd 6227 (1994).

<sup>&</sup>lt;sup>73</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Fourth Report* and Order, 9 FCC Rcd 2330 (1994).

<sup>&</sup>lt;sup>74</sup> Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497 (1999).

exceeding \$3 million for the preceding three years.<sup>75</sup> The SBA has approved of these definitions.<sup>76</sup> At this time, we cannot estimate the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this IRFA that in future auctions, many, and perhaps all, of the licenses may be awarded to small businesses.

- 25. Location and Monitoring Service (LMS): Multilateration LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning LMS licenses, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.<sup>77</sup> A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$3 million.<sup>78</sup> These definitions have been approved by the SBA.<sup>79</sup> An auction for LMS licenses commenced on February 23, 1999, and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses. We cannot accurately predict the number of remaining licenses that could be awarded to small entities in future LMS auctions.
- 26. Rural Radiotelephone Service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.<sup>80</sup> There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.
- 27. Air-Ground Radiotelephone Service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons. There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and the Commission estimates that almost all of them qualify as small entities under the SBA definition.
- 28. Offshore Radiotelephone Service. This service operates on several ultra high frequency (UHF) TV broadcast channels that are not used for TV broadcasting in the coastal area of the states

<sup>&</sup>lt;sup>75</sup> Id.

<sup>&</sup>lt;sup>76</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, Second Report and Order, 13 FCC Rcd 15182, 15192 ¶ 20 (1998); see also 47 C.F.R. § 90.1103

<sup>&</sup>lt;sup>78</sup> Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, Second Report and Order, 13 FCC Rcd at 15192 ¶ 20; see also 47 C.F.R. § 90.1103.

<sup>&</sup>lt;sup>79</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated February 22, 1999.

<sup>&</sup>lt;sup>80</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>&</sup>lt;sup>81</sup> *Id*.

bordering the Gulf of Mexico. At present, there are approximately 55 licensees in this service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons. The Commission is unable at this time to estimate the number of licensees that would qualify as small entities under the SBA definition. The Commission assumes, for purposes of this FRFA, that all of the 55 licensees are small entities, as that term is defined by the SBA.

- 29. Multiple Address Systems (MAS). Entities using MAS spectrum, in general, fall into two categories: (1) those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines "small entity" for MAS licenses as an entity that has average gross revenues of less than \$15 million in the three previous calendar years. "Very small business" is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$3 million for the preceding three calendar years. The SBA has approved of these definitions. The majority of these entities will most likely be licensed in bands where the Commission has implemented a geographic area licensing approach that would require the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission's licensing database indicates that, as of January 20, 1999, there were a total of 8,670 MAS station authorizations. Of these, 260 authorizations were associated with common carrier service. In addition, an auction for 5,104 MAS licenses in 176 EAs began November 14, 2001, and closed on November 27, 2001. Seven winning bidders claimed status as small or very small businesses and won 611 licenses.
- 30. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, we note that MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definitions developed by the SBA would be more appropriate. The applicable definition of small entity in this instance appears to be the "Cellular and Other Wireless Telecommunications" definition under the SBA rules. This definition provides that a small entity is any entity employing no more than 1,500 persons. The Commission's licensing database indicates that, as of January 20, 1999, of the 8,670 total MAS station authorizations, 8,410 authorizations were for private radio service, and of these, 1,433 were for private land mobile radio service.
- 31. Incumbent 24 GHz Licensees. The rules that we adopt could affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The Commission did not develop a definition of small entities applicable to existing licensees in the 24 GHz band. Therefore, the applicable definition of small entity is the

<sup>&</sup>lt;sup>82</sup> Id.

 $<sup>^{83}</sup>$  See Amendment of the Commission's Rules Regarding Multiple Address Systems, Report and Order, 15 FCC Rcd 11956, 12008  $\P$  123 (2000).

<sup>84</sup> Id.

<sup>&</sup>lt;sup>85</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated June 4, 1999.

<sup>&</sup>lt;sup>86</sup> See "Multiple Address Systems Spectrum Auction Closes," Public Notice, 16 FCC Rcd 21011 (2001).

<sup>87</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

definition under the SBA rules for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any entity employing no more than 1,500 persons. We believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

- 32. Future 24 GHz Licensees. With respect to new applicants in the 24 GHz band, we have defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not exceeding \$15 million. 90 "Very small business" in the 24 GHz band is defined as an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years. 91 The SBA has approved these definitions. 92 The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.
- 33. 700 MHz Guard Band Licenses. In the 700 MHz Guard Band Order, we adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. SBA approval of these definitions is not requires.

<sup>&</sup>lt;sup>88</sup> See id. According to Census Bureau data for 1997, in this category, there were a total of 977 firms that operated for the entire year. U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 513322 (October 2000). Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more. Id. The census data do not provide a more precise estimate of the number of firms that have 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

<sup>&</sup>lt;sup>89</sup> Teligent acquired the Digital Electronic Message Service (DEMS) licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

<sup>&</sup>lt;sup>90</sup> Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules To License Fixed Services at 24 GHz, Report and Order, 15 FCC Rcd 16934, 16967 ¶ 77 (2000) (24 GHz Report and Order); see also 47 C.F.R. § 101.538(a)(2).

<sup>91 24</sup> GHz Report and Order, 15 FCC Rcd at 16967 ¶ 77; see also 47 C.F.R. § 101.538(a)(1).

<sup>&</sup>lt;sup>92</sup> See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Gary M. Jackson, Assistant Administrator, Small Business Administration, dated July 28, 2000.

<sup>&</sup>lt;sup>93</sup> See Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission's Rules, Second Report and Order, 15 FCC Rcd 5299 (2000).

<sup>&</sup>lt;sup>94</sup> Id. at 5343 ¶ 108.

<sup>95</sup> Id.

An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, can closed on September 21, 2000. The 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses. 98

Broadband Radio Service (formerly Multipoint Distribution Service) and Educational Broadband Service (formerly Instructional Television Fixed Service). Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS). In its recently issued BRS/EBS Report and Order in WT Docket No. 03-66, the Commission comprehensively reviewed our policies and rules relating to the ITFS and MDS services, and replacing the Multipoint Distribution Service (MDS) with the Broadband Radio Service and Instructional Television Fixed Service (ITFS) with the Educational Broadband Service. In connection with the 1996 MDS auction, the Commission defined "small business" as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years. The SBA has approved of this standard. The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the

(Continued from previous page)

96 Id. At 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-704 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

<sup>&</sup>lt;sup>97</sup> See "700 MHz Guard Bands Auction Closes: Winning Bidders Announced," Public Notice, 15 FCC Rcd 18026 (2000).

<sup>98</sup> See "700 MHz Guard Bands Auctions Closes: Winning Bidders Announced," Public Notice, 16 FCC Rcd 4590 (WTB 2001).

<sup>&</sup>lt;sup>99</sup> Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593 ¶ 7 (1995) (MDS Auction R&O).

<sup>100</sup> See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, Report and Order and Further Notice of Proposed Rulemaking, FCC 03-145 (rel. July 29, 2004) (BRS/EBS Report and Order). As we noted in the Further Notice, there are unique policies associated with ITFS licensees' educational purposes, and the services have already developed their own approach to excess capacity leasing. See Further Notice at ¶ 307-08.

<sup>101 47</sup> C.F.R. § 21.961(b)(1).

<sup>102</sup> See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Bureau, from Gary Jackson, Assistant Administrator for Size Standards, Small Business Administration, dated March 20, 2003 (noting approval of \$40 million size standard for MDS auction).

<sup>&</sup>lt;sup>103</sup> Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. See MDS Auction R&O, 10 FCC Rcd at 9608 ¶ 34.

67 auction winners, 61 claimed status as a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities. 104

- 35. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, <sup>105</sup> which includes all such companies generating \$12.5 million or less in annual receipts. <sup>106</sup> According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year. <sup>107</sup> Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. <sup>108</sup> Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies in the Second Further Notice.
- 36. Multichannel Video Distribution and Data Service. MVDDS is a terrestrial fixed microwave service operating in the 12.2-12.7 GHz band. Licenses in this service were auctioned in January 2004, with 10 winning bidders for 192 licenses. Eight of these 10 winning bidders claimed small businesses status for 144 of these licenses. <sup>109</sup>
- 37. Aviation and Marine Services. Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees. Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity

<sup>&</sup>lt;sup>104</sup> 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard for "other telecommunications" (annual receipts of \$12.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

<sup>&</sup>lt;sup>105</sup> 13 C.F.R. § 121.201, NAICS code 517510.

<sup>106</sup> Id

<sup>&</sup>lt;sup>107</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

<sup>&</sup>lt;sup>108</sup> Id

<sup>&</sup>lt;sup>109</sup> "Multichannel Video Distribution and Data Service Auction Closes," *Public Notice*, DA 04-215 (Feb. 2, 2004).

<sup>&</sup>lt;sup>110</sup> 13 CFR § 121.201, NAICS code 517212 (2002).

that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars. There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

38. **Public Safety Radio Services.** Public Safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services. <sup>112</sup> There are a total of approximately 127,540 licensees in these services. Governmental entities <sup>113</sup> as well as private businesses comprise the licensees for these services. All governmental entities with populations of less than 50,000 fall within the definition of a small entity. <sup>114</sup>

#### D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

- 39. The policies and proposals set forth in the Second Report and Order impact a number of Commission licensees and spectrum lessees in various wireless services. The Second Further Notice explores ways in which licensees and spectrum lessees may enter into arrangements in which advanced technologies are opportunistically employed. The Second Further Notice and seeks to provide parties with greater certainty as to the types of opportunistic use arrangements that would be permitted while fitting into the framework of the Commission's current rules.
- 40. Our proposals in the Second Report and Order to implement certain advanced technologies necessarily implicates potential reporting, recordkeeping and compliance requirements for licensees and

<sup>&</sup>lt;sup>111</sup> Amendment of the Commission's Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853 (1998).

With the exception of the special emergency service, these services are governed by Subpart B of part 90 of the Commission's Rules, 47 C.F.R. §§ 90.15-90.27. The police service includes approximately 27,000 licensees that serve state, county, and municipal enforcement through telephony (voice), telegraphy (code) and teletype and facsimile (printed material). The fire radio service includes approximately 23,000 licensees comprised of private volunteer or professional fire companies as well as units under governmental control. The local government service that is presently comprised of approximately 41,000 licensees that are state, county, or municipal entities that use the radio for official purposes not covered by other public safety services. There are approximately 7,000 licensees within the forestry service which is comprised of licensees from state departments of conservation and private forest organizations who set up communications networks among fire lookout towers and ground crews. The approximately 9,000 state and local governments are licensed to highway maintenance service provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. The approximately 1,000 licensees in the Emergency Medical Radio Service (EMRS) use the 39 channels allocated to this service for emergency medical service communications related to the delivery of emergency medical treatment. 47 C.F.R. §§ 90.15-90.27. The approximately 20,000 licensees in the special emergency service include medical services, rescue organizations, veterinarians, handicapped persons, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities, and emergency repair of public communications facilities. 47 C.F.R. §§ 90.33-90.55.

<sup>113 47</sup> C.F.R. § 1.1162.

<sup>&</sup>lt;sup>114</sup> 5 U.S.C. § 601(5).

spectrum lessees, including: (1) retention of lease agreements; (2) reporting of spectrum leasing terms to the Commission; (3) licensee and lessee compliance with the Commission's technical and service rules; (4) licensee filings with the Commission on behalf of the lessee; (5) licensee verification of lessee compliance with Commission rules; (6) license supervision of a lessee's adherence to the Commission's rules and policies; and (7) the leasing of spectrum by entities designated as "small business" or "very small business" under the Commission's rules. Licensees and spectrum lessees may retain or hire outside professionals (e.g., legal and engineering staff) to draft lease arrangements, provide consulting services, maintain records and comply with applicable Commission rules. They also may employ existing or new employees to be responsible for reporting, recordkeeping, and other compliance requirements.

41. The Second Further Notice also explores what steps the Commission should take to further enhance secondary markets and increase the efficient use of spectrum and the availability to the public of innovative wireless services. The Second Further Notice does not propose any specific reporting, recordkeeping or compliance requirements in these matters. We are open to comment on what, if any, requirements we should impose if we adopt these proposals.

#### E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

- 42. The RFA requires and agency to describe any significant, specifically small business alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for small entities." 115
- 43. Regarding our inquiry on ways to facilitate further development of advanced technologies, see Second Further Notice, paras. 158-164, we do not anticipate any adverse impact on small entities. In fact, small (and large) entities should benefit from the reduction in transaction costs associated with leasing and the availability of other types of arrangements involving opportunistic use of licensed spectrum. We encourage comments on ways in which others may employ advanced technologies to opportunistically use licensed spectrum. Specifically, commenters should propose additional means to increase spectrum access and how that would fit into the rules and policies already established by the Commission. We do not believe that a revision of our rules would adversely impact small entities.
- 44. With regard to spectrum access through spectrum leasing arrangements, we seek comment on additional ways in which licensees and spectrum lessees may utilize advanced technologies, such as opportunistic devices, within the context of the Commission's spectrum leasing policies and rules. See Second Further Notice at para. 160. We do not anticipate that any rules we adopt in this area would adversely impact small entities. We believe that small and large entities will benefit from increased access to spectrum and the utilization of advanced technologies.
- 45. With regard to spectrum access through private commons, we seek comment on the potential for this approach to improve access as well as the regulatory distinctions that are necessary to make this an effective regulatory model. See Second Further Notice at para.161. We do not anticipate any adverse

<sup>115 5</sup> U.S.C. §§ 603(c)(1)-(c)(4).

impact on small entities. We believe that both small and large entities that make use of "smart" or "opportunistic" technologies within their bands will benefit from the private commons option because this approach is designed to minimize some of the transaction costs associated with leasing or other market factors.

- 46. In addition, we seek comment on the technical parameters necessary to distinguish private commons from spectrum leasing arrangements or other arrangements. See Second Further Notice at para 162. We do not anticipate any adverse impact on small entities as a result of setting these parameters. We believe that setting these parameters will benefit both small and large entities by reducing regulatory uncertainty and encouraging spectrum use.
- 47. We also seek comment on the examples of private commons set forth in the Second Report and Order, as well as other types of private commons arrangements. See Second Further Notice at para. 163. As stated in the Second Report and Order, licensee or spectrum lessees establishing a private commons retains direct responsibility for compliance with the Commission's rules. We encourage comment on whether there are any additional policies or requirements that could help ensure compliance. We do not anticipate any adverse impact on small entities as a result of establishing further compliance guidelines. We believe that establishing further compliance guidelines all entities, including small entities, will benefit from the additional control over their spectrum.
- 48. Finally, we seek comment on the appropriate notification process for licensees or spectrum lessees that choose to offer a private commons. See Second Further Notice at para. 164. In the Second Report and Order we stated that a licensee or spectrum lessee managing the private commons must notify the Commission prior to permitting users to begin operating within the private commons. In the Second Further Notice, we propose to give the licensee or spectrum lessee the option of notifying the Commission directly or, in the alternative, providing a URL that posts the terms and conditions. We believe that this procedure will benefit all entities, including small entities, by taking an additional step toward increasing the efficient use of spectrum.

#### F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

- 49. None.
- 50. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Second Further Notice, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

## SEPARATE STATEMENT OF CHAIRMAN MICHAEL K. POWELL

Re: Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking (WT Docket No. 00-230)

Last May, the Commission took an ambitious and pro-competitive step by creating secondary markets, placing a greater emphasis on allowing parties to lease their spectrum rights to third parties better positioned to utilize the spectrum in the most efficient manner. Today's Order further enhances these secondary markets by removing unnecessary regulatory roadblocks.

By setting forth expedited approval procedures for leasing transactions that are in the public interest, consumers in rural areas and nationwide will receive the benefits of inexpensive wireless services more rapidly. In addition, by streamlining secondary market transactions we remove unnecessary regulatory barriers that may be hindering the development of currently under-utilized spectrum. Additionally, our new rules will allow potential entrants greater opportunities to obtain much needed spectrum and create an environment where they can tailor their services according to consumers' needs.

I fully support the changes adopted today because they will encourage dynamic spectrum leasing and further the Commission's goal of making available communications services to all Americans, in the most rapid and efficient manner.

#### SEPARATE STATEMENT OF COMMISSIONER KATHLEEN O. ABERNATHY

Re: Promoting Efficient Use of the Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, WT Docket No. 00-230

Last May, the Commission took an important and innovative step forward when we adopted basic rules to enable facilities-based providers of broadband and other communications services to lease wireless radio spectrum from licensees. Fostering such secondary markets for unused spectrum furthers our overall spectrum management responsibility by ensuring that spectrum is utilized efficiently. What's more, everyone benefits. Lessors are able to monetize unused portions of their spectrum grants. Lessees gain entry to previously unavailable markets. And, most importantly, consumers gain access to a greater range of wireless services – when and where they need them, including in rural areas.

With this Second Report and Order and Further Notice of Proposed Rulemaking, we mark our further progress in the development of flexible and fair secondary spectrum markets. An important part of today's order is to streamline our processing rules governing spectrum leases and other applications, and to provide increased clarity. Streamlining will enable greater speed-to-market for new technologies and services.

As I have stated before, an open, market-based regulatory approach is the best way to ensure the health of our industry and the robustness of its consumer offerings. Already, we have seen promising activity in the secondary markets for spectrum; in less than five months, at least 54 spectrum leasing applications have been filed. As the markets mature — and as we continue to maintain an open, market-based regulatory approach — I anticipate even greater reliance on our secondary-markets system. We will continue to examine ways to improve our rules governing secondary-spectrum markets through our second Further Notice of Proposed Rulemaking and I look forward to reviewing the record and taking additional steps to ensure the efficient use of the spectrum resource.

# STATEMENT OF COMMISSIONER MICHAEL J. COPPS Dissenting

Re: Promoting Efficient Use of the Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, WT Docket No. 00-230

I continue to believe that a well-regulated secondary market in spectrum could lead to more efficient and intensive use of spectrum, and, with new technologies like software designed radio, could assist in bringing innovative spectrum uses to the public. Yet I run into the same problem here that I did last year with the earlier secondary markets item: while there may be policy justification for some of this, there is no legal justification. I believe approval of this item contravenes Section 310(d) of the Communications Act.

In Section 310(d), Congress makes clear that no "station license <u>or any rights thereunder</u> shall be transferred, assigned or disposed of in any manner . . . except upon application to the Commission and upon finding by the Commission that the public interest, convenience, and necessity will be served thereby." But the Commission's ever-expanding secondary market's policies allow licensees to transfer a significant right – the right to control the spectrum on a day-to-day basis – without applying to the Commission and without the requirement of any Commission finding that such transfer serves the public interest.

My dissent to the original Secondary Markets Order includes my full legal argument on this point and I won't repeat it here. But because I believe that the Commission's overall scheme is disallowed by the Communications Act, I will dissent.

## SEPARATE STATEMENT OF COMMISSIONER KEVIN J. MARTIN

Re: Promoting Efficient Use of the Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, WT Docket No. 00-230

In May of last year, we took the first major steps to facilitate the development of secondary markets in spectrum. In that First Report and Order, we adopted a new regime for spectrum leases, allowing leases for which there is no change in *de facto* control to proceed without prior Commission approval and allowing other leases to use a streamlined approval process. We also adopted a streamlined approval process for transfers and assignments of licenses. Our goal was to legitimize fully market transactions in spectrum and to reduce associated transaction costs.

Today's item builds on that framework, further reducing transaction costs and regulatory delay. Among other things, we adopt even more streamlined approval procedures for spectrum leases, assignments, and transfers that do not raise public interest concerns. We also expand the reach of our rules to additional wireless radio services. I believe that these changes will encourage secondary markets to flourish.

Together, our secondary markets rules create new opportunities for licensees with under-utilized spectrum, to the benefit of consumers. A carrier with a business plan that calls for serving only the most densely populated portions of its service area now has every incentive to lease or transfer the balance of their spectrum to an entrepreneur. When cognitive radios and frequency-agile technologies are introduced to the mix, the opportunities multiply.

Additionally, our secondary markets rules offer the promise of greater wireless deployment in rural America. For example, a carrier with a nationwide license can, with reduced transaction costs, lease or sell spectrum to rural carriers to build networks in rural areas. Rural carriers thus have the potential to obtain spectrum and build networks suited to their particular geography, while at the same time enabling the national carrier to develop partners to fill out its footprint.

For all of these reasons, I am pleased to support this item.

#### STATEMENT OF COMMISSIONER JONATHAN S. ADELSTEIN APPROVING IN PART, DISSENTING IN PART

Re: Promoting Efficient Use of the Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, WT Docket No. 00-230

Less than a year ago, the Commission adopted its First Report and Order establishing new policies and rules for secondary market spectrum leasing. In that Order, we achieved an important balance between a market that encourages and nurtures new technologies and spectrum use and one that does not diminish the Commission's ultimate control over the spectrum. Our decision today is an important follow-up to the steps we took last year and generally continues to maintain the balance that I believe is an essential element of good spectrum policy.

I support most of our Order because it acknowledges the importance of secondary markets and takes additional steps to further their development. The Order builds on our initial spectrum leasing framework for secondary markets emphasizing spectrum facilitation and innovation. It promotes our ultimate goal of a robust secondary market.

I strongly believe that secondary markets offer significant opportunities for effective and efficient spectrum use. Secondary markets hold a great deal of promise for the entire nation and particularly for rural areas. By removing burdensome regulatory obstacles, we get the spectrum into the hands of the people who are willing and ready to use it.

I also am pleased to see that the Commission has identified additional avenues for licensees and lessees to use the spectrum. Non-traditional approaches to spectrum facilitation, like the private commons, open the door to more users – which in turn leads to new services. As long as the Commission maintains the right balance, non-traditional approaches can potentially increase the development of secondary markets.

However, I am forced to dissent from a portion of this item because I fear the majority loses its balance in adopting so-called "immediate approval" procedures for certain license transfers and assignments. I am not convinced that there is such a problem with our streamlined transfer and assignment rules and procedures that would warrant a determination to forbear from requiring prior notification for certain transfers and assignments. Indeed, the current procedures with the 21-day waiting period have only been in place for six months. More importantly, though, I think our forbearance analysis falls short here. One of the Commission's bedrock obligations is spectrum management, and I am just not convinced that it is in the public interest for us to forbear from a prior review of all license assignments and transfer of control. The public interest prong of our forbearance analysis is a high bar, and I do not believe that we have developed anywhere near the record to meet it.

In the future, as we move forward to develop our policies for secondary markets we need to maintain the balance between Commission authority and market-based access opportunities. As long as the scales remain equal, I believe that secondary markets will only continue to thrive.